



TFW 2828

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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TITLE: MULTIBAND PLANAR ANTENNA

AMENDMENT "A"

Amendment A: CLAIM AMENDMENTS

Claims 1 - 7 (canceled). Please cancel Claims 1 - 7 and substitute Claim 8 - 13 therefor as follows:

8. (new) A planar broadband patch antenna for transmitting or receiving television signals comprising:

a reflector tuned to a band;

a power supply;

a radiating means supported by said reflector and connected to said power supply, said radiating means for radiating with a first frequency, said radiating means comprising:

a first slot tuned to a second frequency; and

a second slot tuned to a third frequency, said third frequency being different than said first frequency and said second frequency, said first and second slots being connected through a connecting slot, said connecting slot forming a strip line coupling so as to cause an electromagnetic current in said first slot of said second frequency and in said second slot of said third frequency; and

at least one parasitic means arranged above and parallel to said radiating means, the parasitic means for widening a bandwidth in an upper portion of the band, the parasitic means having a size of smaller dimensions than a size of said radiating means.

9. (new) The antenna of Claim 8, said first slot having a size that is different than a size of said second slot.

10. (new) The antenna of Claim 8, said power supply supplying power to said radiating means unsymmetrically between said first and second slots.

11. (new) A planar broadband patch antenna for transmitting or receiving television signals comprising:

- a reflector tuned to a band;

- a power supply;

- a radiating means supported by said reflector and connected to said power supply, said radiating means for radiating with a first frequency, said radiating means comprising:

- a first slot tuned to a second frequency; and

- a second slot tuned to a third frequency, said third frequency being different than said first frequency and said second frequency, said first and second slots being connected through a connecting slot, said connecting slot forming a strip line coupling so as to cause an electromagnetic current in said first slot of said second frequency and in said second slot of said third frequency, said reflector having at least two opposite peripheral edges folded in plane perpendicular to a plane at said reflector and extending toward said radiating means.

12. (new) The antenna of Claim 11, said radiating means defining a plane of polarization, the opposite peripheral edges of said reflector being folded so as to intersect said plane of polarization.

13. (new) The antenna of Claim 11, said reflector and said radiating means being located in respective planes separated by a first distance, the opposite peripheral edges at said reflector are located at a second distance, said second distance being smaller than said first distance.